

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

James D. MCININCH

Appln. No.: 09/698,213

Filed: October 30, 2000

For: **Computational Nucleic Acid  
Coding and Feature Analysis**

Art Unit: 1631

Examiner: M. SHEINBERG

Atty. Docket: 16517.075

#11

Plunkett

2/22/02

## COMMUNICATION

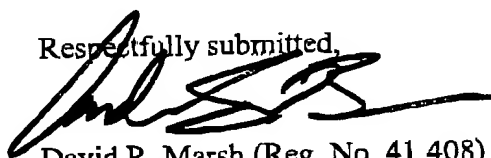
Commissioner for Patents  
Washington, DC 20231Attn: **Examiner Monika B. SHEINBERG**

Sir:

The U.S. Patent and Trademark Office issued a non-final Office Action mailed on November 6, 2001 for the above-identified application. Applicant's agent received the non-final Office Action on February 12, 2002 (attached are copies of the stamped envelope and the face page of the Office Action), not allowing the Applicant proper time in which to respond.

Accordingly, Applicant respectfully requests that the Examiner restart the period for responding to the non-final Office Action.

Respectfully submitted,



David R. Marsh (Reg. No. 41,408)

Andrew S. Brenc (Reg. No. 45,534)

Date:

02/21/2002

ARNOLD & PORTER  
555 Twelfth Street, N.W.  
Washington, D.C. 20004  
(202) 942-5000 telephone  
(202) 942-5999 facsimile

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116517.075 ASB/dms  
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**Patent and Trademark Office**  
 Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
 Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/698,213 10/30/00 MCININCH

J 04983.0220.0

028381

HM12/1106

ARNOLD & PORTER

IP DOCKETING DEPARTMENT; RM 1126(B)

555 12TH STREET, N.W.

WASHINGTON DC 20004-1206

EXAMINER

SHEINBERG, M

ART UNIT

PAPER NUMBER

1631

DATE MAILED

11/06/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

**RECEIVED**  
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**FEB 12 2002**  
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Docketed  
 Due Date  
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*Response*  
*(3x Ext'd.)*

3-6-02

VB

## Office Action Summary

Application No.

09/698,213

Applicant(s)

MCININCH, JAMES D.

Examiner

Monika B Sheinberg

Art Unit

1631

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-44 are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 October 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner. (See PTO-948)
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

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### *Drawings Notice*

Applicant is hereby notified that the required timing for the correction of drawings has changed. See the last 6 lines on the sheet which is attached to the back of the PTO-948, entitled "Attachment for PTO-948 (Rev. 03/01 or earlier)". Due to the above notification Applicant is required to submit drawing corrections within the time period set for responding to this Office action. Failure to respond to this requirement may result in abandonment of the instant application or a notice of a failure to fully respond to this Office action.

### *Election/Restrictions*

Restriction to one of the following inventions is required under 35 U.S.C. § 121:

- I. Claims 1-16, 42, and 43, drawn to probability determination of one or more states for a nucleotide in a nucleic acid sequence, classified in class 435, subclass 6.
- II. Claims 17-21, drawn to probability determination of strand coding of a nucleic acid sequence, classified in class 435, subclass 6.
- III. Claims 22-28, drawn to probability determination of the extent of an open reading frame within a nucleic acid sequence, classified in class 435, subclass 6.
- IV. Claims 29-34, drawn to probability determination of the location of insertions and deletions within a nucleic acid sequence, classified in class 435, subclass 6.
- V. Claims 35-40, drawn to probability determination of exon location, classified in class 435, subclass 6.

The inventions are distinct, each from the other because of the following reasons:

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Groups I-V are different and distinct because each determines a different probability. The probability of Group I concerns one or more states for a nucleic acid in a nucleic acid sequence; the probability of Group II concerns strand coding; the probability of Group III concerns open reading frames; the probability of Group IV concerns insertion and deletion location; and the probability of Group V concerns exon location. Group I does not require determining the probability of strand coding as seen in Group III, nor the probability determined of exon location as seen in Group V; Group II does not require the determination of insertions or deletions as seen in Group IV; and so forth. Each one of these probabilities has different and distinct concentrations within the art.

Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Groups II-V, restriction for examination purposes as indicated is proper.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

### *Inquiries*

Papers related to this application may be submitted to Technical Center 1600 by facsimile transmission. Papers should be faxed to Technical Center 1600 via the PTO Fax Center located in Crystal Mall 1. The faxing of such papers must conform with the notices published in the Official Gazette, 1096 OG 30 (November 15, 1988), 1156 OG 61 (November 16, 1993), and 1157 OG 94 (December 28, 1993) (See 37 CFR § 1.6(d)). The CM1 Fax Center number is either (703) 308-4242, or (703) 308-4028.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monika B. Sheinberg, whose telephone number is (703) 306-0511. The examiner can normally be reached on Monday-Friday from 9 A.M. to 5 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward, Ph.D., can be reached on (703) 308-4028.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to Patent Analyst, Tina Plunkett, whose telephone number is (703) 305-3524, or to the Technical Center receptionist whose telephone number is (703) 308-0196.

November 2, 2001  
Monika B. Sheinberg  
Art Unit 1631

*MBS*

*W Woodward*  
MICHAEL P. WOODWARD  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1600

## PATENT DRAWING REVIEW

The drawing(s) filed (insert date) 10-30-00 are:

- A. ☐ approved by the Draftsperson under 37 CFR 1.84 or 1.152.  
 B. ☒ objected to by the Draftsperson under 37 CFR 1.84 or 1.152 for the reasons indicated below. The Examiner will require submission of new, corrected drawings when necessary. Corrected drawing must be submitted according to the instructions on the back of this notice.

1. DRAWINGS. 37 CFR 1.84(a): Acceptable categories of drawings:  
 Black ink. Color.

Color drawings are not acceptable until petition is granted.

Fig(s) \_\_\_\_\_

Pencil and non black ink not permitted. Fig(s) \_\_\_\_\_

2. PHOTOGRAPHS. 37 CFR 1.84(b)

1 full-tone set is required. Fig(s) \_\_\_\_\_

Photographs may not be mounted. 37 CFR 1.84(c)

Poor quality (half-tone). Fig(s) \_\_\_\_\_

3. TYPE OF PAPER. 37 CFR 1.84(e)

Paper not flexible, strong, white, and durable.

Fig(s) \_\_\_\_\_

Erasures, alterations, overwritings, interlineations,

folds, copy machine marks not accepted. Fig(s) \_\_\_\_\_

Mylar, velum paper is not acceptable (too thin).

Fig(s) \_\_\_\_\_

4. SIZE OF PAPER. 37 CFR 1.84(f): Acceptable sizes:

21.0 cm by 29.7 cm (DIN size A4)

21.6 cm by 27.9 cm (8 1/2 x 11 inches)

All drawing sheets not the same size.

Sheet(s) \_\_\_\_\_

Drawings sheets not an acceptable size. Fig(s) \_\_\_\_\_

5. MARGINS. 37 CFR 1.84(g): Acceptable margins:

Top 2.5 cm Left 2.5 cm Right 1.5 cm Bottom 1.0 cm

SIZE: A4 Size

Top 2.5 cm Left 2.5 cm Right 1.5 cm Bottom 1.0 cm

SIZE: 8 1/2 x 11

Margins not acceptable. Fig(s) 7, 8A, 9B

Top (T) \_\_\_\_\_ Left (L) \_\_\_\_\_

Right (R) \_\_\_\_\_ Bottom (B) \_\_\_\_\_

6. VIEWS. 37 CFR 1.84(h)

REMINDER: Specification may require revision to correspond to drawing changes.

Partial views. 37 CFR 1.84(h)(2)

Brackets needed to show figure as one entity.

Fig(s) \_\_\_\_\_

Views not labeled separately or properly.

Fig(s) \_\_\_\_\_

Enlarged view not labeled separately or properly.

Fig(s) \_\_\_\_\_

7. SECTIONAL VIEWS. 37 CFR 1.84(h)(3)

Hatching not indicated for sectional portions of an object.

Fig(s) \_\_\_\_\_

Sectional designation should be noted with Arabic or

Roman numbers. Fig(s) \_\_\_\_\_

8. ARRANGEMENT OF VIEWS. 37 CFR 1.84(i)

Words do not appear on a horizontal, left-to-right fashion when page is either upright or turned so that the top becomes the right side, except for graphs. Fig(s) \_\_\_\_\_

9. SCALE. 37 CFR 1.84(k)

Scale not large enough to show mechanism without crowding when drawing is reduced in size to two-thirds in reproduction.

Fig(s) \_\_\_\_\_

10. CHARACTER OF LINES, NUMBERS, & LETTERS.

37 CFR 1.84(i)

Lines, numbers & letters not uniformly thick and well defined, clean, durable, and black (poor line quality).

Fig(s) 9A

11. SHADING. 37 CFR 1.84(m)

Solid black areas pale. Fig(s) \_\_\_\_\_

Solid black shading not permitted. Fig(s) \_\_\_\_\_

Shade lines, pale, rough and blurred. Fig(s) \_\_\_\_\_

12. NUMBERS, LETTERS, & REFERENCE CHARACTERS.

37 CFR 1.84(n)

Numbers and reference characters not plain and legible.

Fig(s) 9A

Figure legends are poor. Fig(s) \_\_\_\_\_

Numbers and reference characters not oriented in the same direction as the view. 37 CFR 1.84(p)(1)

Fig(s) \_\_\_\_\_

English alphabet not used. 37 CFR 1.84(p)(2)

Figs \_\_\_\_\_

Numbers, letters and reference characters must be at least .32 cm (1/8 inch) in height. 37 CFR 1.84(p)(3)

Fig(s) \_\_\_\_\_

13. LEAD LINES. 37 CFR 1.84(q)

Lead lines cross each other. Fig(s) \_\_\_\_\_

Lead lines missing. Fig(s) \_\_\_\_\_

14. NUMBERING OF SHEETS OF DRAWINGS. 37 CFR 1.84(i)

Sheets not numbered consecutively, and in Arabic numerals beginning with number 1. Sheet(s) \_\_\_\_\_

15. NUMBERING OF VIEWS. 37 CFR 1.84(u)

Views not numbered consecutively, and in Arabic numerals, beginning with number 1. Fig(s) \_\_\_\_\_

16. CORRECTIONS. 37 CFR 1.84(w)

Corrections not made from prior PTO-948 dated \_\_\_\_\_

17. DESIGN DRAWINGS. 37 CFR 1.152

Surface shading shown not appropriate. Fig(s) \_\_\_\_\_

Solid black shading not used for color contrast.

Fig(s) \_\_\_\_\_

COMMENTS

REVIEWER J. L. HASE

DATE 10-29-01 TELEPHONE NO. 202-305-2430

**Attachment for PTO-948 (Rev. 03/01, or earlier)  
6/18/01**

**The below text replaces the pre-printed text under the heading, "Information on How to Effect Drawing Changes," on the back of the PTO-948 (Rev. 03/01, or earlier) form.**

**INFORMATION ON HOW TO EFFECT DRAWING CHANGES**

**1. Correction of Informalities -- 37 CFR 1.85**

New corrected drawings must be filed with the changes incorporated therein. Identifying indicia, if provided, should include the title of the invention, inventor's name, and application number, or docket number (if any) if an application number has not been assigned to the application. If this information is provided, it must be placed on the front of each sheet and centered within the top margin. If corrected drawings are required in a Notice of Allowability (PTOL-37), the new drawings **MUST** be filed within the **THREE MONTH** shortened statutory period set for reply in the Notice of Allowability. Extensions of time may **NOT** be obtained under the provisions of 37 CFR 1.136(a) or (b) for filing the corrected drawings after the mailing of a Notice of Allowability. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.

**2. Corrections other than Informalities Noted by Draftsperson on form PTO-948.**

All changes to the drawings, other than informalities noted by the Draftsperson, **MUST** be made in the same manner as above except that, normally, a highlighted (preferably red ink) sketch of the changes to be incorporated into the new drawings **MUST** be approved by the examiner before the application will be allowed. No changes will be permitted to be made, other than correction of informalities, unless the examiner has approved the proposed changes.

**Timing of Corrections**

Applicant is required to submit the drawing corrections within the time period set in the attached Office communication. See 37 CFR 1.85(a).

Failure to take corrective action within the set period will result in **ABANDONMENT** of the application.

06/01/01

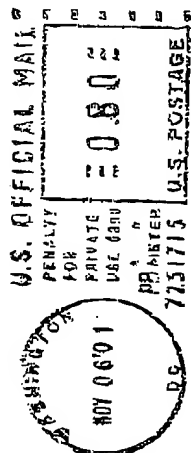


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## Fax Transmittal

GROUP 1600

FEB 22 2002

February 21, 2002

RECIPIENT NAME(S)	RECIPIENT FAX NUMBER(S)	RECIPIENT TELEPHONE NUMBER(S)	RECIPIENT ROOM # (S)
Examiner Monika B. Sheinberg U.S.P.T.O., Art Unit 1631	(703) 308-4556	(703) 306-0511	
SENDER	SENDER'S TELEPHONE NUMBER	SENDER'S ROOM NUMBER	
Andrew S. Brenc (Reg. No. 45,534)	(202) 942-5085	1190	
CLIENT/MATTER NUMBER	TIMEKEEPER NUMBER	NUMBER OF PAGE(S)	
Our Ref. No. 16517.075	4980	We are transmitting 10 page(s) (including this cover sheet)	
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This document must be transmitted no later than: February 21, 2002 - ASAP		Alternate telephone number at which the sender can be reached if there are difficulties with this fax: Deborah R. Hicks (202) 942-6473	
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MESSAGE			

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